Critical needs analysis for indigenous additional language education: a brazilian example

Michol Miller
Graham Crookes

Abstract

Needs analysis is often the first step in planning an additional language curriculum; however, the process should be differentiated when implemented in the specific context of additional language education in indigenous school settings. The present paper proposes a collaborative critical needs analysis process for developing critical additional language teaching materials for an indigenous school. A historical overview of needs analysis within mainstream additional language education is provided, followed by a discussion of more recent work on needs analysis from a critical perspective. The theoretical contributions are then considered in the context of the first author’s experiences conducting a needs analysis for developing trilingual vocabulary materials for teaching English as an additional language in a Krahô indigenous school in Tocantins, Brazil. The account of what was done is used to develop a perspective on what critical and indigenous-oriented needs analysis concepts and procedures should be in future field applications in indigenous education. Conceptual sources such as Participatory Action Research, active interviewing, and a dialogical perspective on needs analysis instruments are advocated as a means to bring the practice of needs analysis into alignment with critical and indigenous perspectives, thus identifying and providing preliminary responses to the conceptual gaps which remain to be filled by future work in this area.

Keywords: Critical needs analysis. Indigenous education. Additional language education.
A análise crítica de necesidades para lenguas adicionales en la educación indígena: un ejemplo brasileño

El análisis de necesidades suele ser el primer paso en la planificación de un currículo de lenguas adicionales; sin embargo, el proceso debe diferenciarse cuando se aplica en el contexto específico de la enseñanza de lenguas adicionales en entornos escolares indígenas. El presente trabajo propone un proceso colaborativo de análisis crítico de necesidades para desarrollar materiales didácticos críticos para una escuela indígena. Se presenta una visión general histórica del análisis de necesidades en la enseñanza regular de lenguas adicionales, seguida de una discusión de trabajos más recientes sobre análisis de necesidades desde una perspectiva crítica. Se consideran las contribuciones teóricas en el contexto de las experiencias del primer autor en la realización de un análisis de necesidades para desarrollar materiales de vocabulario trilingüe para la enseñanza de inglés como lengua adicional en una escuela indígena krahô en Tocantins, Brasil. El relato de lo que se hizo se utiliza para desarrollar una perspectiva sobre lo que deben ser los conceptos y procedimientos de análisis de necesidades críticos y orientados a los indígenas en futuras aplicaciones de campo en la educación indígena. Se defienden fuentes conceptuales como la Investigación Acción Participativa, la entrevista activa y una perspectiva dialógica de los instrumentos de análisis de necesidades como medios para alinear la práctica del análisis de necesidades con las perspectivas críticas e indígenas, identificando y proporcionando así respuestas preliminares a las lagunas conceptuales que quedan por llenar en futuros trabajos en esta área.
Introduction

Language revitalization practitioners working in indigenous educational settings recognize that socially oppressive structures and forms of life (lack of territory, threats from mining and logging, inadequate health and social infrastructure, etc.) both constrain and inform their work.

Under these conditions, critical approaches to indigenous language pedagogy are needed to produce appropriate forms of curriculum. In this case, appropriate means having at least an action orientation supporting maintenance and revitalization in these communities, as aspects of social justice. Indigenous language teachers can take up this approach supported by critical applied linguists; however, such collaborations should be self-determined and self-governed (MCIVOR, 2020). Not surprisingly, gaps, lacks, and problems exist. We focus on one here, regarding what should be the initial move in curriculum development—needs analyses.

In the development of curriculum and basic teaching materials whether for indigenous or endangered languages or mainstream ones, it is accepted that an early step should be a needs analysis. This step has been subject to inspection and critique for the development of critical additional language curriculum development. Indigenous language program development almost by definition needs a critical perspective, that is to say, it needs critique that is informed by the concept of indigeneity, and can also build on Western (as well as non-western) understandings of critical theory, not to mention critical pedagogy. Various conceptual and practical issues arise. There are considerable gaps when indigenous-oriented professional critical language practice is contemplated; reviewing and reworking needs analysis is an appropriate first step.

The present paper proposes a collaborative critical needs analysis process for developing critical additional language teaching materials for an indigenous school. It is based on the first author’s experience working with the Krahô people in Tocantins, Brazil, to develop trilingual vocabulary materials in a multilingual curriculum. In the sections that follow, we first sketch the overall background to the concept and practices of needs analysis as early established with mainstream languages in mind, and in more recent work, reimagined from a critical viewpoint. We then describe the field experiences and some preliminary work towards critical indigenous additional language needs analysis. We continue by considering what should have been done, or would be done, in a future return to the field as this area of concepts and practice is brought into alignment with critical and indigenous perspectives, thus identifying and providing preliminary responses to the conceptual gaps which remain to be filled by future work in this area.

---

1 In the spirit of the dialogical, context-situated nature of critical inquiry, and in recognition of needs analysis as a personal product produced by a professional in a specific time and place, performed under real-world constraints of time and availability of information, a more personal, colloquial tone has been adopted in the writing of this piece; this stylistic choice allows the authors to accurately portray and analyze the direct experiences of the first author in dialogue with theoretical contributions on the topic.
The background to needs analyses

Several mostly separate areas or lines of work can be identified that represent the antecedents to the understanding of needs analysis to be considered in the body of this paper.

First: The practices and basic concept of a needs analysis as part of curriculum design can be traced back to Tyler (1949) if not earlier (since he refers to 15 years of previous curriculum development). In the first pages of his influential (1949) monograph, Tyler, whose writing suggests he views himself as an inheritor of the Deweyan progressive tradition who is also aware of the “essentialists” (TYLER, 1949, p. 4), reviews two main perspectives on children’s needs. After several pages of broad discussion of how curricular objectives could be arrived at from consideration of students’ needs, the term itself understood from various perspectives, as a temporary conclusion he comments:

It is possible then to identify some needs that are common to most American children, other needs that are common to almost all of the children in the given school, and still other needs that are common to certain groups within the school but not common to a majority of the children in the school. To get a clear picture of the needs of learners, I would suggest that you consider the school with which you are most familiar and that you outline particular investigations that could be carried on in that school to give you the kind of information about the needs of students which would throw some light on objectives for that school (TYLER, 1949, p. 7).

So at least we can say that the concept of a local investigation of a local population as the basis for progressive education has been in existence for more than 50 years.

Second: Anecdotal descriptions of what might appear as critical needs analyses avant la lettre are to be found in Freire’s early work (e.g., FREIRE, 1973). Goulet’s introduction to that work concisely refers to the initial steps of his literacy method which seem close to needs analysis procedures:

American readers of Pedagogy of the Oppressed will find in Education as the Practice of Freedom the basic components of Freire's literacy method. These elements are participant observation of educators tuning in to the vocabulary universe of the people; their arduous search for generative words at two levels: syllabic richness and a high charge of experiential involvement… (GOULET, 1973, p. viii).

Here are the first three of those elements in Freire’s own (translated) words, in greater detail:

Phase 1 Researching the vocabulary of the groups with which one is working. This research is carried out during informal encounters with the inhabitants of the area. One selects not only the words most weighted with existential meaning (and thus the greatest emotional content), but also typical sayings, as well as words and expressions linked to the experience of the groups in which the researcher participates. These interviews reveal longings, frustrations, disbeliefs, hopes, and an impetus to participate. During this initial phase the team of educators form rewarding relationships and discover often unsuspected exuberance and beauty in the people's language.

Phase 2 Selection of the generative words from the vocabulary which was studied. The following criteria should govern their selection:

a) phonemic richness;

b) phonetic difficulty (the words chosen should correspond to the phonetic difficulties of the language, placed in a sequence moving gradually from words of less to those of greater difficulty);

c) pragmatic tone, which implies a greater engagement of a word in a given social, cultural and political reality (FREIRE, 1973, p. 49).
These first phases reflect, in particular, the needs of an L1 literacy program. With Portuguese having a predictable and transparent writing system, Freire believed that about “Fifteen or eighteen words seemed sufficient to present the basic phonemes of the Portuguese language” (ibid., p. 49). These phases might suggest that he was working with what we might now call a lexical syllabus. But the next phase adds to this:

Phase 3 The creation of the "codifications:" the representation of typical existential situations of the group with which one is working (FREIRE, 1973, p. 51).

This suggests a second strand to the syllabus being built up. A word like *tijolo* (brick) is to be “placed in a "situation" of construction work. But these “situations” are by no means neutral (“at the store”, “at the bus station”). They are chosen because of their problematic features. Situations are not just physical. Freire (1973, p. 57) provides one example which is more complex: “We planned filmstrips, for use in the literacy phase, presenting propaganda—from advertising commercials to ideological indoctrination—as a problem-situation for discussion”.

Shifting now to conventional applied linguistics: Despite the importance of needs analysis in applied linguistics course design practice and theory, not a lot of attention has been given to it. In one of the most extended treatments of the topic in applied linguistics, Long (2005) complains that its history is undocumented and the needs of needs analysis, by which he means its methodological and conceptual demands, have been insufficiently considered. We identify two strands in this area that stand prior to the development of a more critical view, as follows.

On the history, Long cites Swales’ (1985a) *Episodes in ESP*, which suggests that Long saw needs analysis as becoming prominent in our field along with the rise of English for Specific Purposes (ESP). But in that volume, ESP expert Swales is slightly dismissive of the matter. In his brief discussion of it, he does recognize the influence of the Munby “model”. This was Munby’s (1978) “needs analysis processor” — more recently, Hall (2013) reconfirms Munby as a turning-point. In his entirely theoretical (book length) exercise, British Council specialist Munby outlined how to specify in detail the communicative needs of learners. Swales writes that he does not blame Munby for the misuse of his model but also attributes to this misuse the somewhat “anti-humanistic” (SWALES, 1985a, p. 189) features that he says needs analysis subsequently acquired2. Swales’ history of ESP projects makes almost no explicit reference to the matter apart from this brief remark, though it is clear from his accounts of such projects that an informal consultative process was common, in some cases grounded in years of residence and familiarity, between outside expatriate experts and local academics in international universities with curricula oriented to science

---

2 “Of course, many ESP teachers continued to recognize that their learners were human beings who had wishes and expectations as well as externally-defined needs, but the charge levelled against ESP in the immediate past that it was ‘anti-humanistic’ or even ‘inhumane’ had a certain force…” (Swales, 1985a, p. 189).
and engineering. The emphasis however tended to be the analysis of, initially, the vocabulary and subsequently the genres of textbooks and texts (written in English) preparing international students for specialized science courses, both in-country and in receiving countries (especially the US and the UK). As Hall (2013, p. 3) comments, the Munby model “does not involve the learner - it is very much an outsider's view of needs, collecting data about the learner, not from the learner-and that its subcategories are rather inconsistent and reliant on introspection”.

ESP recognized the need to get away from an outsider perspective in the influential early paper by Ramani, et al. (1988) on the importance of an ethnographic approach to needs analysis. Ramani, et al. cite Swales (1985b) as the most central impetus to their ethnographic development of needs analyses. Based on investigations in their own institution, Ramani, et al. call for “participatory research” (p. 81) in which ESP specialists work with local experts to identify communicative practices and instructional needs. This point, and this term, are significant and we will return to them later.

Despite the importance, one way or another, of needs analysis in ESP, it was in fact not the only early impetus for applied linguistics needs analysis. Also important was the language projects of the Council of Europe, which formed the basis of the extremely influential curriculum specifications, such as Threshold, upon which many subsequent Communicative Language Teaching courses were developed around the world. These projects were reported first as working papers which circulated among specialists, as early as 1972 (e.g., RICHTERICH, 1972; TRIM, 1973). French applied linguist Richterich was the main specialist involved with needs analysis work in this area and some of his reports were later published in book form (1983; RICHTERICH & CHANCEREL, 1977/1987). These reports include brief discussions of methodology. Richterich and Chancerel (1987) include short accounts of the use of surveys and interviews as well as speculation concerning their strengths and weaknesses, along with case studies.

Not very visible on the surface of the narrow technical work on needs were its values, but the much larger project they formed a part of was in fact strongly humanistic and internationalist in character. Looking back later, project director Trim (2007) referred to them as “the ideological base” and listed them as follows.

- the strengthening of pluralist participatory democracy and the development of an informed, independent but socially responsible public opinion,
- the encouragement of personal mobility and interaction;
- the promotion of intensified international co-operation and joint action to tackle the significant social issues of the time;
- respect for human rights, implying:
  • understanding and tolerance of cultural (and hence linguistic) diversity as a source of mutual enrichment,
  • the democratisation of education, with languages for all rather than for a social or professional élite and the participation in decision-making of all those affected by those decisions (TRIM, 2007, p. 16-17).

Certainly the project was intended to support the free movement across European borders of workers and the autonomous development, by individuals acting outside of educational institutions, in their own
self-development which could be for personal growth independent of employment needs (though work was important). Trim’s early (1973) paper even recognizes the extra language learning needs of working-class students who (he notes) will have been ill-served by the lack of provision of additional language instruction in their schooling. In its self-aware and explicit sociohistorical, cultural, and political locatedness, this tradition was far more engaged than even an ethnographic ESP version of needs analysis.

Third: Despite these positive features in two strands of early needs analysis work, it is probably the case that subsequently a fairly technicist, stripped-down understanding of needs analysis was common, absent and entirely separate from discourses of European identity (e.g., KELLINY, 1988). Small and simple needs analyses were done in association with the growth of the version of ESP that established itself most widely, namely EAP, and as such, tended to be “curriculum-oriented” (JONES & ROE, 1975, p. 5, apud KELLINY, 1988, p. 20); that is, not concerned with a societally-located, holistically-understood learner. Even later, Huhta, et al. (2013, p. 17) comment: “needs analyses in professional contexts are quite often conducted somewhat casually, involving little more than the teacher setting a placement test for the learners and/or asking the professional client or vocational course administrator to provide a list of desired outcomes for the course. While it is true that these types of informal inquiries are quick and cost-effective, such investigations may reflect only a single perspective of only one group of stakeholders, for example that of the employers or learners. For that reason, they may lead to no more than a partial sketch of the professional context”. Despite Ramani et al. (1988), they were probably rarely ethnographic. Despite Savage & Storer (1992) and Hall (2001), they were only occasionally participatory.

And it was this general run of the mill perspective, though not itself analyzed in detail, that Benesch, in her path-breaking (1999) work which coined the term “critical needs analysis”, was working to get beyond. With Benesch’s initiative, not only were the liberal values of European needs analysis (or the Deweyan progressive education behind Tyler’s ideas) restored, more radical values were introduced into needs analysis, for the first time since Freire’s work. Benesch’s critical needs analysis is explicitly in line with Freire’s ideas, though focused on different features.

At the same time, a critical perspective on needs analysis was also to be found in the important work of Jasso-Aguilar (1999), oriented to a vocational ESP context (the hotel industry). This work was remarkably well-grounded in participant observation (as an aspect of an ethnographic approach), as the author worked as a maid in a Honolulu hotel in order to gain a realistic understanding of the language and communication needs, as well as challenges, in the work situations that a group of prospective students of English for hotel purposes faced.

Let us now recall an important meaning of the word ‘critical’. As used by Horkheimer (1937), a critical theory is one that does not merely describe reality, but has within it the capacity to enable change. Consistent with this, Benesch’s (1996) critical needs analysis states that changing the current situation in
which her students found themselves was a goal of the analysis. This is different from previous work. Conventional needs analyses are forward looking and above all, compliant. Although there may be fairly immediate communication needs, the mainstream of needs analysis typically does not question the supposed responsibility of an expert to enable a student to design a program or project future needs as arising, whether from a work or educational institution, or (in the vanishing aspirations of Trim and Richterich) from the hopes of post-war Europe.

Benesch (1996) describes a critical needs analysis process conducted to support the development of a paired EAP/psychology curriculum in a North American university context. The author criticizes descriptive approaches to needs analysis in which “the researcher does not look for ways to modify current conditions but instead aims to fit students into the status quo by teaching them to make their behavior and language appropriate” (BENESCH, 1996, p. 727), and in turn, fails to critically analyze the underlying social issues affecting students’ academic lives, such as gaining employment or completing their degrees. Her needs analysis revealed contradictory demands on the students at university, departmental, and classroom levels, and that her students’ needs for academic English to pass the psychology course in question differed greatly from top-down fiscal decisions and policies made by the university administration. In response, she developed three types of activities to help her students meet those demands: activities to help her students meet the requirements of the course, activities to help them challenge the requirements, and activities to help them work outside the requirements to “create possibilities for social awareness and action” (BENESCH, 1996, p. 732). Benesch argues that, instead of “simplifying existing conditions and adapting students to them,” a critical approach to needs analysis “acknowledges existing forms, including power relations, while searching for possible areas of change” (1996, p. 732). By recognizing the hierarchy of power within institutions, critical needs analyses may be able to identify areas where action may be taken to achieve greater equality and justice.

Since this crucially important critical turn in needs analysis, represented by Benesch and Jasso-Aguilar, their work has been cited in discussions of needs analysis, but it would appear that little has been added to them. For example, in her comprehensive and well-informed recent survey Course design in English for Specific Purposes, Woodrow (2018) considers both Jasso-Aguilar (1999; referring to her study as “seminal”) and Benesch (1996) in her chapter on needs analysis, and mentions Macallister’s (2016) brief survey of “critical perspectives.” But neither Woodrow nor Macallister cite other studies that are actually needs analyses oriented but with a critical approach.³

Meanwhile, the extent to which recent substantial thought and practice concerning mainstream (i.e., not explicitly critical) needs analysis has progressed is indicated by the fairly recent work of Huhta, et al.

³ See also Starfield (2012), who notes Johns & Makalela’s (2011) reflections on what should have been done had a more critical approach been applied to an outside expert’s needs analysis. But again, even though it has a section on critical needs analysis, like Macallister (2016), this overview has no additional reports to summarize.
(2013). This gives us a sense of Needs Analysis as it is now, at least for applied linguistics (as opposed to curriculum writers based in the field of education, perhaps). Some development took place as a result of specialists recognizing the range of perspectives that could and perhaps had to be encompassed under the term needs. Hutchinson and Waters (1987) referred to target needs and learning needs, and under the former noted the outcome of (1) an analysis of the target situation, (2) an analysis of what a teacher would need to handle and (3) what the learners themselves perceived as “a lack”. Huhta, et al. (2013) also allude to the work of Berwick (1989): objective needs versus subjective needs; and Brindley (1989):

Needs which are process-oriented and those which are product-oriented, where the former are concerned with how the learning is carried out, while the priority for the latter is the final outcome of the course. Taking the earlier example of the middle manager, a process-oriented view would consider how confidence in dealing with visitors can be gradually increased, and a product-oriented need would be defined as an ability to conduct a conversation with a visitor (BRINDLEY, 1989, apud HUHTA ET AL., 2013, p. 12).

We also have the term situation analysis, which implies a broader view of the context for needs, as well as “means analysis” (HOLLIDAY & COOKE, 1982), which alludes more to the teaching context. Chambers (1990) first proposed the concept of “target situation analysis” (TSA) as necessary for untangling the numerous and possibly conflicting needs of different stakeholders identified in a standard needs analysis; in TSA, determining the constraints on course implementation (often, available time and money) are utilized to help prioritize the long-term, permanent needs of learners, over short-term needs that may be subject to change. More recently, Richards (2001, p. 91) defines situation analysis as “an analysis of the factors in the context of a planned or present curriculum project that is made in order to assess their potential impact on the project… [which] may be political, social, economic, or institutional”, and considers this process as one dimension of the overall needs analysis process. Nation & Macalister (2020) opt for the term “environment analysis” (synonymous with situation analysis or “constraints analysis”) as the investigation of the factors related to students, teachers, and the teaching situation that will ultimately affect the success of a language program, and involves identifying constraints that shape program goals, content, and implementation.

Robinson (1991) is brought in by Huhta et al. (2013), as she distinguishes between micro-level needs (those of the learner), meso-level needs (those of the institution, or workplace) and macro-level needs (those of “society”; unfortunately conceptualized in a unitary and probably pro-business way). They then promote the comprehensive definition of needs analysis from Brown (2006) as:

The process of identifying the language forms that students ultimately will need to use in the target language. However, since the needs of the teachers, administrators, employers, institutions etc. also have some bearing on the language learning situation, many other types of quantitative and qualitative information of both objective and subjective types must be considered in order to understand both the situation and the language involved as well as information on the linguistic content and the learning processes. Needs analysis is the systematic collection and analysis of all
subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of the particular institutions that influence the learning and teaching situation (BROWN, 2006, p. 102 apud HUHTA ET AL., 2013, p. 12).

Robinson’s position is important for Huhta, et al. (2013) because its societal orientation (at least) jibes with European policy-level work they (understandably, as Europeans) wish to be in line with. It brings us back to part of the origin history previously sketched by way of Trim (and keeps us also in a privileged first world environment). In specifying what they helpfully label “second generation needs analysis” they take major guidance from the Council of Europe (2001). This policy document, which is well-known as a base for the Common European Framework for Assessment, does in fact reflect the sophisticated, optimistic, transnational aspirations we met earlier (as opposed to the rather stripped-down consumer-oriented service English perspective of ESP). Here is a starting quote (which also indicates that the Council has gone over to a task-based perspective, again one more social and sophisticated than some SLA-driven TBLT forms):

A comprehensive, transparent and coherent frame of reference for language learning, teaching and assessment [is intended] ... The approach adopted ... is an action-oriented one in so far as it views users and learners of a language primarily as 'social agents', i.e. members of society who have tasks ... to accomplish in a given set of circumstances, in a specific environment and within a particular field of action ... [l]anguage activities ... form part of a wider social context, which alone is able to give [these activities] their full meaning. We speak of 'tasks' in so far as the actions are performed by one or more individuals strategically using their own specific competences to achieve a given result. The action- based approach therefore also takes into account the cognitive, emotional and volitional resources and the full range of abilities specific to and applied by the individual as a social agent ...environment and within a particular field of action ... [l]anguage activities ... form part of a wider social context, which alone is able to give [these activities] their full meaning (COUNCIL OF EUROPE, 2001, p. 9, in HUHTA ET AL., 2013, p. 10).

In developing second generation needs analysis Huhta, et al. (2013) (ibid., p. 15, their emphases) identify the most progressive elements of Council of Europe thinking— social agency and holism, as indicated in this quote:

As a person, every learner is interwoven socially into diverse networks, each of which can be characterised by a different strand of social relationship. Not only is the learner a contributor to the learning experience of a group, he or she is also a family member, a stakeholder in local and national elections and, of course, a colleague in the workplace. The learner's participation in these various networks forms his or her identity as a person. This phenomenon is what the CEFR calls social agency.
We can now see why a needs analysis which will take account of the goals, values and priorities of each of the stakeholders is clearly a necessity. This kind of needs analysis requires a holistic approach which will consider the person of the whole learner as that person appears in the context of his or her social group(s) (see Jaatinen, 2001 on holism in foreign language education). In a holistic approach, dichotomies such as subjective and objective needs are no longer adequate because from the outset, the design and implementation of the ESP course need to accommodate the interplay of social, cognitive, emotional and volitional dimensions of learning. ... A holistic needs analysis, then, is one which takes account not just of the individual, but also of how that individual interacts in the contexts and situations of his or her field of action (HUHTA ET AL., 2013, p.15).
In concluding their discussion (and before proceeding to detailed worked examples) Huhta, et al. (2013) spend time emphasizing the importance of qualitative data in determining needs, and considering the full range of possibilities here.

What we have established (at least to our own satisfaction) is that despite the path-breaking work of Benesch (1996), and in addition the early example of Jasso-Aguilar (1999), there have been few direct follow-ons. That is partly because critical EAP has not been an active area of research and publication (even by comparison with other areas of language-related critical pedagogy). However, it could be that a sensitivity to power has been taken up somewhat in the mainstream of EAP (WOODROW, 2018). The fundamental insights of Benesch, that one can take a rights perspective into needs analysis, remain, and that the immediate situation itself (as opposed to some future deployment of the needs analysis) is also a target, as a result of her work. At the same time, we now have second generation needs analysis, emanating not directly from the purely curriculum-driven context of EAP, but from the more values-forward context of European aspirations for increasingly united Europe with a mobile and interculturally-competent citizenry.

We may now ask how these ideas, especially the critical ones, can be integrated into indigenous education and what is needed if an indigenous community is to learn English as an additional language (without weakening their grip on their own indigenous language). What is critical indigenous education, and how can a critical needs analysis be done so as to bring about a critical English as an additional language curriculum in the context of an indigenous (colonized) community?

Experiences in Brazil

In 2012 when I (Michol Miller) served as a Fulbright English Teaching Assistant (ETA), an opportunity presented itself to collaborate in the development of intercultural ELT materials for the multilingual curriculum at the Escola 19 de Abril, in the indigenous Krahô territory in the state of Tocantins, Brazil. The school is dedicated to the perpetuation of the indigenous Krahô language, culture, and traditional knowledge. Nevertheless, it is bound to top-down curricular requirements imposed by state and federal curricular requirements, which require the teaching of English as a foreign language. The LALI-UFT/NEPPI indigenous education research group at Universidade Federal do Tocantins works to support the school by conducting research in partnership with the school and community to create intercultural materials for all school subjects in the school curriculum (LALI-UFT); I later joined the project in 2016 to help support the creation of specialized English materials.

The school presented a decidedly multilingual setting as the backdrop for the development of English materials. At the time of my visit, the indigenous students learned to read and write in Krahô before acquiring Portuguese, with English making a 1-hour weekly appearance in the curriculum during the
secondary years of schooling. In fact, the community maintains a diglossic situation with nearly 100% of the village population acquiring the indigenous language as their L1, followed by the acquisition of L2 Portuguese both through the activities at the school but also in regular contact with the non-indigenous residents of the town five kilometers away (ABREU, 2012). The school is a locus of bilingual activity, with a mix of non-indigenous and indigenous staff, and regular visits from other outsiders such as researchers and staff from the Fundação Nacional dos Povos Indígenas (FUNAI), or National Indian Foundation, among others.

An initial investigation revealed that the teaching of the maternal Krahô language and Portuguese were greater priorities for both the school and community. Presented with the task of fitting English into this multilingual curriculum in a way that supported the bilingual practices of the community, all within a minimal number of available hours in the curriculum, I needed a structured approach to determining the practical scope of the proposed materials. The logical answer was to conduct a needs analysis, a commonly employed and crucial first step (as previously discussed) when seeking to determine the scope and content of a language curriculum, and in turn, any teaching materials to be produced to support that curriculum.

The first phase of the needs analysis process consisted of a situation analysis, a process intended to determine the constraints and limitations that can both positively and negatively affect the implementation of a successful language curriculum (NATION & MACALISTER, 2020; RICHARDS, 2001). The situation analysis, carried out through document research, investigated key factors present in the educational context that would constrain or limit the outcome of the materials, including national, state, and local educational policy, the number of hours available in the curriculum for English, the English language background of the local teachers, and previous educational research conducted in collaboration with the Krahô community.

The situation analysis of the school context (MILLER, 2018) revealed that, under the Brazilian constitution, indigenous groups are guaranteed the right to integrate their languages and culture into their educational processes in order to maintain their traditional languages and cultures; this finding highlighted the need for English materials to integrate Krahô language and culture in this fashion. However, after investigating the curricular requirements at the state level, it became apparent that only one hour per week was reserved for English education, coming to a total of 280 hours at the end of secondary schooling; with this number of hours, it was estimated that students could possibly reach level A1 or A2 on the Common European Framework of Reference for Languages (CEFR); it was clear that English was not featured prominently in the curriculum, taking third place to Krahô and Portuguese.

The second phase in the needs analysis process consisted of a four-day visit to the school. The first thing I did upon arrival was meet with the teachers, school staff, and the cacique (the leader of the indigenous community) to explain the objective of my visit, which was to support the school by gathering information to help develop English learning materials for their use. Upon receiving their approval, I observed both English and Portuguese language classes for four days and along the way, conducted brief,
informal interviews with stakeholders in the school and community, including school coordinators, teachers, elders, community leaders, and students in order to find out their perspectives on the role of English in their community and school. As my presence as a North American seemed to be a novelty for the community, I was invited to give a guest English class to students and community members on my final day.

Classroom observations revealed both indigenous and non-indigenous teachers’ frequent use of translanguaging between the Krahô language and Portuguese to ensure students’ understanding in the language classes. Indigenous teachers would divide their time between Krahô and Portuguese, and non-indigenous teachers spoke Portuguese, interspersing familiar Krahô vocabulary and expressions when the need arose. These multilingual practices reflected the multilingual practices of daily life in the community, with Krahô dominating most interactions, and Portuguese employed when speaking with non-indigenous interlocutors. English classes were heavily focused on basic vocabulary lessons and the use of simple tenses; the use of English in the classroom occurred mainly at the lexical level, and did not go beyond simple phrases with the verb “to be”, raising the question, what purpose could English serve for these stakeholders when there were virtually no English speakers present to communicate with?

In conversation with teachers, some answers came to light. Students preparing to take the ENEM college entrance exam would encounter English, as any other non-indigenous Brazilian student would, and this was the driving reason that the language was included in the curriculum. Teachers volunteered other reasons beyond college entrance exams, however, and explained that the students were very interested in English since they often encountered the language in popular music, media, and even advertising in the city; they also felt said that it was important for their students to learn English in order to be able to access more information online. Although these uses of English were related to activities beyond the village, the teachers still thought it was necessary that the content of their ELT materials should reflect the students’ daily lives in the village; in their view, it was necessary for materials to be connected to students’ experiences to engage them in learning the language. The teachers also specifically requested that English materials be written in all three languages (Krahô, Portuguese, English), for a very practical reason—not all teachers could speak Krahô, and not all teachers knew English, so this would ensure the materials would be usable for all teachers. The school coordinator also recognized students’ general interest in learning English but indicated that the reduced number of hours in the curriculum would limit what could be covered in the English classes, especially in the high school years.

On the final day of my visit, I gave a simple English class covering English introductions; school-age students, school staff, the cacique, elders, and even young children were in attendance. After rehearsing

---

4 The Exame Nacional do Ensino Médio, or the National High School Exam, is a standardized national exam taken by students each year for admission to federal universities and other institutions.

**PERSPECTIVA, Florianópolis, v. 41, n.1 p. 01-22, jan./mar. 2023**
basic introductions and asking older students to come up and demonstrate what they learned, the lesson organically shifted to how students might translate their names into English. Interested parties would say their names in Krahô, the teachers and coordinator would translate it to Portuguese, and then I would find a rough equivalent in English. In this exchange, I was able to experience a bit of the translanguaging process myself and witness students’ interest in English grow when translating their names—a direct connection to their daily lives. The visit was far too brief; I thanked the school staff and community for their kind reception and set to the task of creating materials.

Based on what I observed and learned in conversation with the school community, I decided the first place to start in creating useful materials would be to create a list of vocabulary that could be adapted to the current classroom practices at the school. In line with teachers’ specific request, the vocabulary lists should be trilingual to be accessible to all users and could also be readily employed in the translanguaging practices already present in daily classroom interaction. I remembered what teachers had said about the need for learning materials to be connected to students’ daily lives, and the interest students had shown when translating their own names to English. I knew that creating English learning content focused on Krahô culture would be impossible on my own; luckily, members of LALI-UFT had already worked with teachers to create a series of intercultural textbooks (for Portuguese, history, geography, and mathematics, among many others) written in both Krahô and Portuguese (LALI-UFT), and I decided to use these textbooks as an initial source of vocabulary content.

To accomplish this task, I compiled a small corpus centered around common cultural themes prevalent in daily village life and which were already integrated into the school curriculum and teaching materials for other courses, including topics such as rituals, body painting, planting, animals, and cultural practices. The corpus consisted of 106 short texts in Portuguese sourced from the existing textbooks; an analysis of the most frequently occurring single lexical items and multi-word collocations at the phrasal level were then compiled into the trilingual vocabulary list, grouped into nouns, adjectives, and verbs (MILLER, 2018). The final trilingual vocabulary list consisted of approximately 434 lexical items and 73 collocations, across seven thematic areas (MILLER, 2018). The list was then revised for accuracy by the indigenous teachers at the school and the final version delivered to the school for further adaptation into their English classroom.

My impromptu, informal class revealed students’ great interest in learning English words directly related to their own lives; thus, it made sense to compile English vocabulary that could similarly be adapted into the multilingual practices of the school and support the common practice of translanguaging employed by teachers. Considering the results of the needs analysis that revealed the limited number of curriculum hours reserved for English, the logical conclusion was to start with a base of vocabulary that could later be developed into classroom exercises by teachers.
Reflections

The needs analysis described above falls somewhere between first- and second-generation needs analyses. A major factor in the decision to implement a needs analysis was my sensitivity to the community’s mission to maintain the strength of the Krahô language and culture; it was imperative to avoid creating English materials that would detract from this goal (particularly with the introduction of language content associated with Western US culture and values). Instead, I hoped to develop English content that would complement the existing multilingual practices in both the school and the community and looked to needs analysis as a principled approach to do so. However, the data collection tools and methods (surveys, interviews, and classroom observations) I employed for my needs analysis were designed for largely instrumental purposes; in other words, the objective and subjective information I was seeking and the questions I asked during the investigation were directed at establishing the language learning needs of the students as viewed by the stakeholders, with the larger goal of meeting the requirements of the governing institutions influencing the school context (i.e., federal and state curricular requirements) (cf. BROWN, 2006).

Although the results of my needs analysis were largely a product of the instrumental approach I employed, there were some elements in the process that could be linked to second-generation needs analysis, and even critical needs analysis. According to Huhta et al. (2013), second-generation needs analysis views language learners as social agents engaging in language activities as part of a wider social context, and calls for a holistic approach (JAATINEN, 2001) to determining language learning needs. My own process was oriented by a holistic view of existing multilingual practices in both the school and larger community; I attempted to gain insight on how teachers, students, and community members envisioned the role of English in their environment. I designed survey and interview questions, but the most fruitful insights I gained during the process were from my ethnographic observation of daily classroom routines and my interaction with students and community members during the informal English class. I was particularly sensitive to my role as an outsider and sought to prioritize teachers’ perceptions and expectations as local experts through classroom ethnography, similar to Ramani, et al. (1988) and Jasso-Aguilar (1999).

A major feature of Benesch’s (1996) critical needs analysis process was her rejection of what she called “descriptive” (i.e., merely instrumental) needs analyses in favor of a critical analysis of the learning situation, acknowledging that every educational setting may place contradictory demands on learners, while simultaneously looking for opportunities for changes to the status quo that might lead to greater equality for students. In the case of the Krahô, the major change to be accomplished in the curriculum was the adaptation of English teaching to the specialized, local, and differentiated educational approach of the school. ELT processes and supporting pedagogical materials appropriate for this approach were not yet
firmly established; nor had there been in-depth consideration of the purposes of such materials and the role of English itself in the lives of the students, other than meeting top-down curricular requirements. Dutifully following the needs analysis process, I gathered extensive information to help establish how pedagogical ELT materials could be developed to support the teaching of the language in ways that would fit the desires of the community. However, there are a number of things that could have been done differently and which should be discussed, if needs analysis is to be moved, not only in a critical direction, but in a sense beyond it, to make it maximally appropriate to an indigenous education setting. It is these to which we now turn.

What a critical needs analysis for indigenous language education should look like

I was initially invited to collaborate in the materials development project as someone who could fulfill the role of “English language expert,” likely due less to my work as an English teacher, and rather more to my identity as a citizen of the United States, viewed to some degree as a representative of the English language and North American academic culture. However, I quickly realized I did not wish to disturb the processes of cultural and linguistic revindication and maintenance at the heart of the mission of the 19 de Abril school. I desired to engage ethically with the community and meet their desires concerning the role of English in the school, and I implemented the practice of needs analysis (as it had been presented in the mainstream literature of applied linguistics), confident in its value as a well-researched tool of language curriculum design. However, that practice of needs analysis had been developed for implementing a vastly different type of language program—those found in academic or professional settings in the industrialized Western world. This is where a critical viewpoint would have better served my efforts and the needs of the community.

A critical approach to needs analysis would have demanded that the needs analyst go well beyond simply cataloging and describing the factors and constraints influencing English teaching at the school (institutional requirements, number of available curricular hours, etc.). It would encompass moving beyond an ethnographic perspective, conducting classroom observations, surveys, and interviews designed according to my point of view as an outsider - the needs analysis should initiate a substantial dialogue with the community as a first step. This is consistent, obviously, with a central concept and perspective in critical pedagogy. Then, in addition, there is a major longstanding tradition that has marched in parallel with critical pedagogy that should also be brought in, namely Participatory Action Research (PAR).

Participatory action research (PAR) is an approach to social science research applied in a variety of different fields (including community development, education, and public health) that views people as active participants in research rather than objects of study and promotes practical action; at its roots PAR has a connection to Freirean traditions (particularly in the field of community development) as a tool for community organizing and problem solving (SELENER, 1997). PAR has been implemented in a variety of
traditional and indigenous community settings in the Americas and is characterized by a collaborative and egalitarian approach to research carried out in partnership between researchers and communities, with the ultimate goal of improving people’s lives (FERREIRA & GENDRON, 2011), at least ever since the very early 1970s (FALS BORDA, 1973). In PAR, power and self-determination are central themes; community members are actively involved throughout the entire research process and are guided by researchers to identify, analyze, and solve problems; in this way, power is shifted to the otherwise marginalized and oppressed and greater awareness of their own strengths and resources stimulates people towards their own self-reliant development (SELENER, 1997).

The role of the researcher in PAR is as a collaborative participant, facilitator and learner. Freire himself writes about the role of the researcher in action research: “Instead of taking the people here as the object of my research, I must try, on the contrary, to have the people dialogically involved also as subjects, as researchers with me… in doing research, I am educating and being educated with the people” (FREIRE, 1972/1982, p. 30). Therein lies another key facet of PAR: it can be considered more scientific because “community participation in the research process facilitates a more accurate and authentic analysis of social reality” (SELENER, 1997, p. 20). Learning with and from the community “contributes knowledge and insight to the researcher, thus improving the research process and product”, and ultimately resulting in more suitable outcomes for the community (FERREIRA & GENDRON, 2011, p. 165). This is particularly important in indigenous settings, where outside researchers become students of the indigenous perspective and culture, because “research interventions that are designed for indigenous community transformation should have at their core indigenous beliefs and values” (FERREIRA & GENDRON, 2011, p. 158).

Another key element in PAR is the role of popular knowledge, “the empirical, common-sense knowledge belonging to the people… which has its own rationality… demonstrable merit and scientific validity” (SELENER, 1997, p. 25). Participatory researchers recognize that knowledge is a source of power for dominant groups in society and seek to legitimize popular knowledge alongside formal scientific knowledge. However, the possession of popular knowledge alone is not enough; it lays dormant in the community, primarily used for survival rather than liberation and must be “‘ unearthed’ in each individual, collectively reformulated, and analyzed, so that it can be applied in collective actions to benefit a group or community” (SELENER, 1997, p. 25). The power to make decisions in a community may have been lost and the role of the researcher is to help communities become empowered by rediscovering the potential of their own knowledge and participating in new knowledge generation.

So how can this be achieved? The objectives of PAR are complementary to Freire’s dialogical approach aimed at raising the critical consciousness of individuals. Freire acknowledges that humans are clearly capable of knowledge through experience, but do not necessarily understand the causal links of phenomena or problems in their daily lives; therefore, he supposed, “the more accurately men grasp true
causality, the more critical their understanding of reality will be” (FREIRE, 1973, p. 44). He saw this raising of consciousness (conscientização) as a way to stimulate action within individuals: “Once a man perceives a challenge, understands it, and recognizes the possibilities of response, he acts. The nature of that action corresponds to the nature of his understanding. Critical understanding leads to critical action (FREIRE, 1973, p. 44).” Freire’s “active, dialogical, critical, and criticism-stimulating method” is characterized by equal participants linked by empathy, love, hope, and mutual trust which enables them to engage in a critical search through communication, as opposed to “anti-dialogue” carried out through vertical relationships between interlocutors, which is arrogant, anti-critical, and without empathy (FREIRE, 1973, p. 45).

How, then, can the tenets of PAR and critical dialogue be applied to the process of needs analysis? One possibility lies in establishing the objectives of a research project. Participatory research places decision-making about community problems in the hands of the community; Ferreira & Gendron (2011) advocate for equal participation of researchers and community members in formulating research questions, defining methods, implementing research, and analyzing and interpreting data. Needs analysis can easily be adapted to this orientation; the researcher should make the methods, steps and goals of the needs analysis procedure transparent. Rather than the outside researcher arriving with a predetermined plan of what type of data should be collected and who to collect it from, the community should be involved in planning the needs analysis from the beginning. In an indigenous setting, stimulating critical understanding of how establishing needs leads to curriculum outputs could in turn lead to the inclusion of stakeholders, types of language, communicative needs, and educational goals previously unknown to the researcher and unaccounted for in a standard (non-critical) needs analysis.

Research methods can certainly be considered (and sometimes have been) in light of a more critical, participatory orientation. In social science, interviewing is a primary source of data collection, but its conventional use is not conducive to stimulating the critical and active dialogue Freire envisioned. The conventional interview views the conversation as a “pipeline for transmitting knowledge” and participants as “passive vessels of answers for experiential questions put to respondents by interviewers...[and] repositories of facts and the related details of experience” (GUBRIUM & HOLSTEIN, 2003, p. 69). In contrast, the practice of active interviewing offers participatory researchers an alternative to data collection and knowledge generation in line with Freire’s critical dialogue. Active interviewing acknowledges the active roles both interviewer and respondent play in co-constructing meaning, and the collaborative nature of the data generated in the interview; interviewing is conceived as an interpretive practice or a form of practical reasoning, in which respondents formulate and transform meaning according to the interaction that unfolds (GUBRIUM & HOLSTEIN, 2003). In the active interview, special attention is paid to the ways in which knowledge is assembled; “understanding how the meaning-making process unfolds is as critical as apprehending what is substantively asked and conveyed” (GUBRIUM & HOLSTEIN, 2003, p. 68).
Thus, to arrive at critical needs analysis, it is necessary to revise and reorient the research process at both the levels of planning and implementation. Active interviewing provides an example of how researchers can achieve this reorientation towards the goal of community empowerment. In participatory research, empowerment is achieved by involving communities in knowledge generation; participatory researchers first “elicit, organize, and systematize existing popular knowledge”, then “identify and adapt existing ‘scientific’ knowledge for the people’s benefit”, and finally work to create new knowledge by synthesizing the two (SELENER, 1997, p. 28). Working towards equal community participation and partnership in needs analysis can create space for indigenous epistemologies, or indigenous ways of knowing, doing, and being in the world; inclusion of these epistemologies in curriculum development can help ensure that a language program will match the desires and concerns of the community (GEGEO & WATSON-GEGEO, 2002).

Conclusion: How a critical needs analysis should be done for an indigenous multilingual community

In this paper we have reviewed what was done, as the basis for rethinking, reviewing, critiquing, and thereby developing our proposal for what should be done when implementing a critical needs analysis. We have taken the existing (though not well-known nor very much reported-on) literature in the domain of critical needs analysis and extended it in the direction of indigenous language education, by way of several strands of thought and practice. First, after conducting a thorough investigation into the background of needs analysis in applied linguistics, we argue that a critical orientation in needs analysis should be taken up more than before, particularly when specialists find themselves involved in assisting indigenous or endangered language communities in developing and implementing language policy and appropriate educational practices in their local contexts. Further, Participatory Action Research provides a deep and broad body of theory and practice which merits inclusion in critical additional language curriculum development for indigenous communities. And within this space, the specific tools used by critical language pedagogy-oriented program developers, such as interviews, need to be reconsidered and upgraded in light of the central Freirean concept of critical dialogue— this leads us to take up ideas such as equitable community participation in developing research questions and needs analysis procedures, and the use of active interviewing as a critical, participatory method of data collection. In future work, the implementation of critical needs analysis in indigenous language education may prove useful for integrating indigenous epistemologies (GEGEO & WATSON-GEGEO, 2002), indigenous views on language (LEONARD, 2017), and relational and elder pedagogies (HOLMES & GONZÁLEZ, 2017) into culturally and locally appropriate language curricula.
Referências


