



An Affective Model of English Language Teachers' Information Seeking for Professional Development in Nigerian Universities

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DOI: [10.33329/rjelal.13.2.537](https://doi.org/10.33329/rjelal.13.2.537)



Article info

Article Received: 10/06/2025
Article Accepted: 28/06/2025
Published online: 30/06/2025

Abstract

This is a conceptual paper based on a critical synthesis of the literature; it reports no empirical data. University English language teachers must find, assess and use information from a widening range of scholarly and professional sources for their professional development. Searching can involve uncertainty, frustration, anxiety, curiosity and satisfaction, and these emotions may influence whether teachers persist, change strategy or withdraw. Although teacher emotions and information behaviour have each attracted growing attention, their relationship has seldom been examined, and not at all, in the literature reviewed, for English language teachers in Nigerian universities. Drawing on control-value theory, broaden-and-build theory, the Information Search Process and affective load theory, the paper proposes an affective model of teachers' information seeking for professional development. The model distinguishes general teaching emotions from emotions experienced during a particular search, treats emotional self efficacy as a personal coping resource, and treats library and institutional support as a contextual moderator. The paper defines each construct operationally, specifies the direct, moderated, mediated and feedback pathways among them, and derives five testable propositions. It closes with tentative implications for university libraries, English departments and management, and with an agenda for testing that includes separate measurement of general and search-specific emotions, psychometric validation of adapted instruments in Nigeria, and longitudinal designs.

Keywords: teacher emotions; information behaviour; information seeking; professional development; English language teachers.

1. Introduction

Professional development is a continuing process of growth that language teachers pursue through activities such as workshops, peer observation, reflective journals, action research and engagement with professional literature (Richards & Farrell, 2005). Many of these activities require information. A lecturer who wishes to change how composition is taught, redesign a course or prepare a conference paper must recognise an information need, find and assess suitable sources, and use what is found.

Information seeking is not purely cognitive. Kuhlthau (1991, 2004) showed that searchers pass through identifiable feelings, from uncertainty and anxiety early in a search to growing confidence as a focus emerges. Research on teachers has likewise shown that teaching is emotional work, in which enjoyment, anger and anxiety are central (Frenzel et al., 2016; Sutton & Wheatley, 2003). Taken together, these bodies of work suggest that teachers' emotions may shape how they seek information for professional development, yet the literature reviewed for this paper gives this relationship little direct attention.

The question matters particularly in Nigeria, where university libraries operate under uneven conditions. Okiy (2005) identified inadequate funding, inadequate electricity supply and shortages of skilled staff as obstacles to the use of information technology in Nigerian university libraries, and Nwanekezie (2022) found irregular power supply to be the most serious constraint on information technology use in the private university library studied. More recent work has examined information literacy education in Nigerian library schools (Eze & Aduba, 2022) and continuing challenges to information literacy in Nigerian universities (Anunobi & Ukwoma, 2016). Such conditions may affect not only access to information but also how searching feels. However, the Nigerian studies reviewed are descriptive and concern students, librarians or infrastructure; none

examined the emotions of university teachers seeking information for their own development.

This paper therefore proposes an affective model of English language teachers' information seeking for professional development in Nigerian universities. It addresses three questions. What do theories of emotion and information behaviour suggest about how feelings shape teachers' information seeking? How can these insights be combined into a model suited to Nigerian universities? What testable propositions follow, and how can they be examined empirically?

1.1 Nature of the Paper and Literature Synthesis

This is a critical synthesis, not a systematic review, and no data were collected or analysed. Literature was selected according to four criteria. First, relevance: each source had to address at least one of four strands, namely teacher emotions, affect in information behaviour, the theories used to build the model, or the information environment of Nigerian universities. Second, type: priority was given to peer-reviewed empirical studies, foundational theoretical works and established measurement instruments. Third, context: Nigerian and African studies were sought wherever available, supplemented by international work on language teachers. Fourth, verifiability: every source was checked against its original publication details, and sources that could not be confirmed were excluded. The sources were synthesised thematically, by identifying what each strand establishes, where the strands connect and where evidence is missing. Because the review is not systematic, the gap it identifies is a gap in the literature reviewed, and it is stated as such.

1.2 Procedure for Constructing the Model and Deriving Propositions

The model was built in four steps. First, the problem was defined: research treats teacher emotions and information seeking separately, and Nigerian research on information use is largely descriptive. Second, each of the four

theories was assigned a role: control-value theory explains how conditions and appraisals produce emotions (Pekrun, 2006); broaden-and-build theory explains how positive emotions may widen search behaviour (Fredrickson, 2001); the Information Search Process locates emotions within the stages of a search (Kuhlthau, 1991, 2004); and affective load theory explains the emotional demands of searching and the role of coping resources (Nahl, 2005). Third, the constructs implied by these roles were arranged into six components linked by specified pathways (Table 3). Fourth, each proposition was derived by stating one pathway as a testable relationship, with its direction fixed where theory supports it.

2. Discussion

2.1 Teacher Emotions and Professional Development

Teachers may enjoy a lesson that goes well, feel anxious when demands exceed their resources and become frustrated when institutional conditions obstruct their work. Such feelings may affect motivation, engagement and willingness to invest effort in professional activities (Frenzel et al., 2016; Sutton & Wheatley, 2003). Research on language teachers, much of it from Iran, supports this. Greenier et al. (2021) found that emotion regulation and psychological wellbeing predicted the work engagement of British and Iranian English teachers; Fathi et al. (2021) found support for a model in which emotion regulation mediated the relationship of self efficacy and reflection with burnout among Iranian EFL teachers; and Derakhshan et al. (2022) found that resilience, wellbeing and grit predicted Iranian teachers' enjoyment of teaching. Differences of context mean that these findings cannot simply be transferred to Nigerian universities, but they show that affect is relevant to language teachers' professional functioning. The question for this paper is how such emotions become linked to the information seeking that professional development requires.

2.2 Affect in Information Behaviour

In Kuhlthau's (1991, 2004) Information Search Process, searching involves cognitive, behavioural and affective experiences, with uncertainty typically strongest early in a search and confidence growing as a focus develops. Feelings are thus part of searching, not reactions at its edges. Affective load theory adds that information tasks carry an affective load, made up of uncertainty together with negative feelings such as irritation, anxiety and frustration under felt time pressure, which users manage through affective coping skills such as self efficacy and optimism (Nahl, 2005). Savolainen (2014) likewise examined, in a conceptual analysis, how emotions can initiate, sustain or discourage information seeking. Searching may become affectively demanding when users meet confusing systems, failed queries, unfamiliar terminology or information overload, and in Nigerian universities also inaccessible databases, unreliable connectivity and power cuts. The present paper does not assume that such conditions always produce frustration or avoidance; it proposes that their effects depend on teachers' appraisals, their emotions during the search, their coping resources and the support available.

Nigerian scholarship has examined librarians' conceptions of information literacy (Anyaku, 2016), the development of information literacy in universities (Anunobi & Ukwoma, 2016) and information literacy education in library schools (Eze & Aduba, 2022). This work provides useful context, but it does not examine the emotions university teachers experience when seeking information for their own professional development, which is the relationship the model addresses.

2.3 Theoretical Foundations of the Model

Four perspectives underpin the model. Control-value theory holds that achievement emotions arise from appraisals of control and value (Pekrun, 2006): positive emotions are likely when an activity is valued and the person

feels able to meet its demands, while anxiety or frustration arise when an important activity seems beyond one's control. Broaden-and-build theory proposes that positive emotions broaden people's repertoire of thoughts and actions and, over time, build personal resources (Fredrickson, 2001); in the model, this grounds the expectation that interest, curiosity and enjoyment are associated with exploratory searching. The Information Search Process locates emotions within particular searches, which allows the model to distinguish emotions about teaching in general from emotions arising in a specific search. Affective load theory highlights the emotional demands of difficult searches and the role of coping resources (Nahl, 2005). The model extends this reasoning by adding emotional self

efficacy, which Kirk et al. (2008) define as confidence in one's ability to perceive, understand, use and manage emotions, as a coping resource. This is the authors' extension, not a component of affective load theory, and it requires testing.

2.4 The Proposed Affective Model

The model has six components: professional conditions and appraisals, teacher emotions, emotional self efficacy, information-seeking behaviour, library and institutional support, and professional development outcomes (Figure 1). The relationships among them are hypotheses, not effects demonstrated among Nigerian teachers.

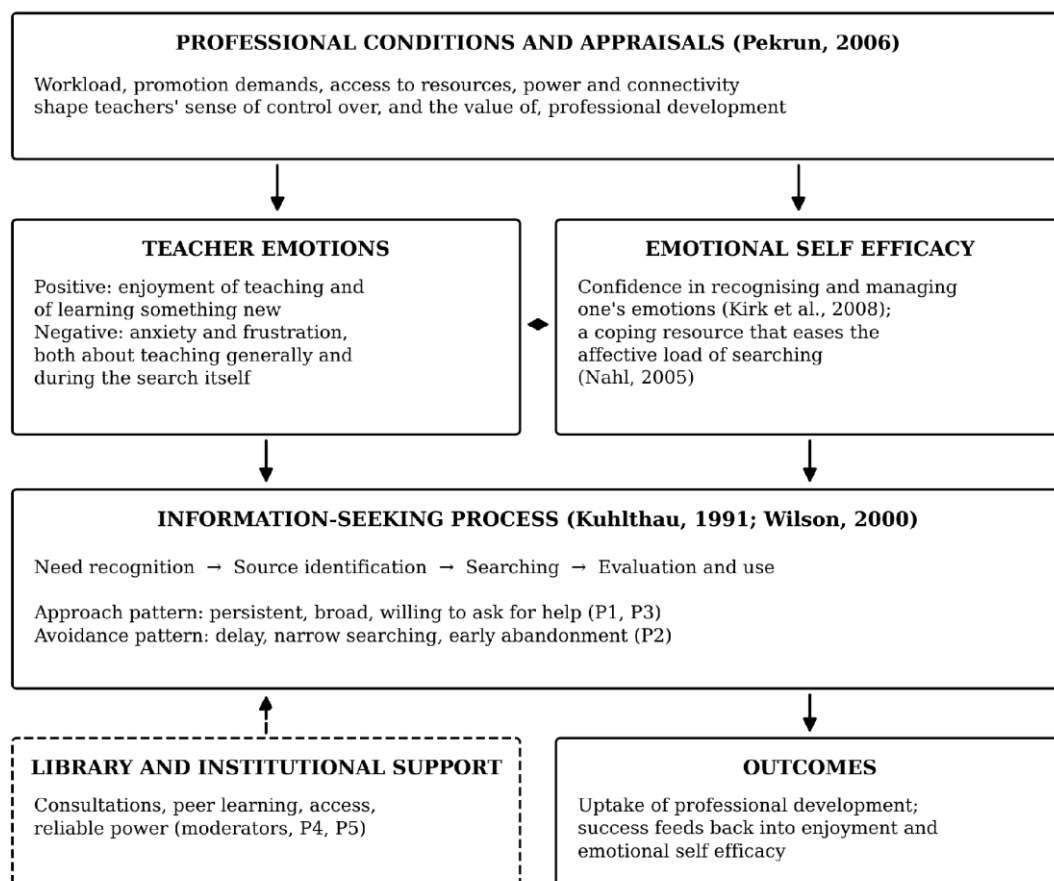


Figure 1. An affective model of English language teachers' information seeking for professional development

Note. Arrows represent hypothesised relationships to be tested empirically; P1 to P5 refer to the propositions in Section 2.8, and the pathways are specified in Table 3. Source: Authors' construct.

An information need arises from professional conditions, such as preparing a publication, learning a new teaching method or revising a course, and the teacher's emotional response depends partly on how much the goal is valued and how much control the teacher feels over it. Teacher emotions include both general professional emotions and emotions specific to a search: a teacher may be enthusiastic about professional development yet frustrated during a difficult search. Emotional self efficacy may influence how teachers respond to difficulty during searching. Information-seeking behaviour takes approach-

oriented or avoidance-oriented patterns, which are not fixed traits, since the same teacher may respond differently under different conditions. Library and institutional support, such as research consultations, database orientation, responsive reference services and reliable access, may change how teachers experience and respond to difficult searches. Finally, successful searches may contribute to professional development outcomes, and the experience of success or failure feeds back into later emotions and confidence. Table 1 relates the stages of searching to typical feelings and possible support.

Table 1. Stages of information seeking, typical feelings and possible support for English language teachers

Stage	Typical feelings	Teacher's task	Possible library or institutional support
Need recognition	Uncertainty; sometimes enthusiasm	Identify what is needed, for example a new approach to teaching academic writing	Departmental seminars and mentoring that help lecturers frame needs
Source identification	Uncertainty; anxiety about where to look	Decide which databases, journals or colleagues to consult	Guides to subject databases; brief consultations with a librarian
Searching	Confusion, frustration and doubt, especially when searches fail or power and connectivity break down	Search, refine terms and persist	Practical workshops; reliable access and alternative power supply; help desks
Evaluation and use	Growing confidence or disappointment	Judge relevance and quality, then apply the information in teaching or research	Peer learning circles in which lecturers share and discuss what they found

Source: *Stages and feelings adapted from Kuhlthau (1991, 2004); support applications by the authors.*

2.5 Operational Definitions of the Constructs

Table 2 defines each construct in measurable terms and proposes how it could be measured. Two principles guide the definitions. First, general teacher emotions and search-

specific emotions are measured separately, with different reference periods. Second, information-seeking behaviour is measured through records of what teachers do as well as through what they report.

Table 2. Operational definitions and proposed measures of the model's constructs

Construct	Operational definition	Proposed measure
General teacher emotions	The enjoyment, anxiety and anger or frustration a teacher habitually experiences in teaching and professional work	Adapted Teacher Emotions Scales (Frenzel et al., 2016), with items referring to teaching in general
Search-specific emotions	The interest, anxiety, frustration and uncertainty a teacher experiences during a particular information search	Short state items anchored to one identified search (for example, "During this search I felt frustrated"), completed immediately after a set search task or a search recalled from the past week
Emotional self efficacy	Confidence in one's ability to perceive, understand, use and manage one's emotions (Kirk et al., 2008)	Adapted Emotional Self Efficacy Scale (Kirk et al., 2008), validated in the Nigerian sample
Approach-oriented seeking	Behaviours that sustain or widen a search: reformulating terms, trying further sources, asking for help, persisting and evaluating what is found	Counts from search logs and diaries (reformulations, sources tried, help requests, time spent) plus a short behavioural checklist
Avoidance-oriented seeking	Behaviours that curtail a search: postponing, settling on the first accessible source, narrowing the need or abandoning the search	Logged postponements and abandonments, time to abandonment and reliance on a single source, plus a short checklist
Infrastructural constraints	Limitations of electricity, connectivity and access to resources that impede searching	A perceived constraints scale, together with recorded outages and access failures during search tasks
Library and institutional support	The availability and quality of consultations, orientation, reference services and access arrangements that help teachers search	A perceived support scale, together with records of support actually used
Professional development outcomes	Tangible products of professional learning within a set period	Counts of revised course materials, submitted papers or presentations and new methods trialled, from teachers' records

Source: Authors' construct.

2.6 Specification of Pathways

Table 3 specifies the type of each pathway in the model, so that direct, moderating, mediating and feedback relationships can be tested separately. The appraisal pathway from

professional conditions to emotions is part of the model's theoretical basis and can be tested, but it is not stated as a separate proposition.

Table 3. Pathways in the model and how they can be tested

Type of pathway	Relationship	Proposition	Suggested test
Appraisal	Professional conditions → appraisals of control and value → emotions	Background	Regression or path analysis of appraisals on conditions and of emotions on appraisals
Direct	Positive emotions → approach-oriented seeking (positive)	P1	Regression controlling for general emotions and experience
Direct	Search-specific negative emotions → avoidance-oriented seeking (positive), beyond general emotions	P2	Hierarchical regression entering general emotions first
Moderation	Emotional self efficacy weakens the link between search-specific negative emotions and avoidance	P3	Interaction term, with simple slopes at different levels of self efficacy
Mediation	Infrastructural constraints → search frustration → avoidance	P4	Indirect effect with bootstrap confidence intervals, preferably with constraints, frustration and avoidance measured at successive times
Moderation	Support weakens the link between search difficulty and the loss of approach-oriented seeking	P5	Interaction term, or comparison of supported and unsupported conditions
Feedback	Search outcome at one time → emotions and emotional self efficacy at the next	Background	Longitudinal panel with three or more waves, analysed with cross-lagged models

Source: Authors' construct.

2.7 Illustrative Scenario

Consider an English lecturer preparing a conference paper on a teaching method she knows little about. Her first searches of the library's databases return many irrelevant results, and as the deadline nears she grows frustrated and doubts that she will find what she needs. One possible response is avoidance: she stops exploring unfamiliar databases, relies on the first sources she found or postpones the search. If instead a librarian helps her reword

her search terms and choose a suitable database, the search begins to yield relevant material, her frustration eases and her confidence grows, and she continues searching and evaluating sources. The same person, facing the same difficulty, follows a different pattern because support changed how the situation developed. The scenario is illustrative, not evidence; it shows how the proposed pathways might operate and what research should examine.

2.8 Testable Propositions

The following propositions are derived from the pathways in Table 3, and their constructs are defined in Table 2. They are hypotheses, not established findings.

Proposition 1. Positive emotions associated with professional development, including interest, curiosity, enjoyment and hope, will be positively associated with approach-oriented information seeking among English language teachers in Nigerian universities.

Proposition 2. Search-specific negative emotions, particularly anxiety, frustration and uncertainty, will be positively associated with avoidance-oriented information seeking, even after accounting for teachers' general emotions about teaching and professional development.

Proposition 3. Emotional self efficacy will moderate the relationship between search-specific negative emotions and avoidance-oriented information seeking, so that the relationship is weaker among teachers with higher emotional self efficacy.

Proposition 4. Greater infrastructural constraints will be associated with greater search-related frustration, which in turn will be associated with greater avoidance-oriented information seeking.

Proposition 5. Library and institutional support will moderate the relationship between search difficulty and approach-oriented information seeking, so that teachers who receive or perceive stronger support are more likely to maintain approach-oriented seeking when they encounter difficulty.

2.9 Tentative Implications for Nigerian Universities and Libraries

If the propositions are supported, support for professional development should not be limited to providing databases and other resources; it should also address the difficulties teachers meet while searching. University libraries could offer research consultations,

database orientation and responsive reference services to academic staff at the point of need, particularly when lecturers are preparing publications, conference papers or teaching materials. English departments could use seminars, research groups and mentoring to make information seeking a shared professional activity in which difficulty is not treated as a sign of inadequacy. University management could address the infrastructural conditions that make searching unnecessarily hard, including electricity, connectivity and database access. The model does not imply that every difficult search requires an emotional intervention: many problems are technical or infrastructural and should be addressed directly. Its point is that access, timely help and confidence in managing difficult searches may be complementary.

2.10 Agenda for Empirical Testing

The model requires empirical testing before any conclusion about its usefulness can be drawn, and its complexity makes validated local instruments essential. Testing should proceed in stages, beginning with measurement and simple relationships before the full model is examined.

Separating general and search-specific emotions. General teacher emotions should be measured with items referring to teaching in general, while search-specific emotions should be measured with short state items anchored to one identified search, completed immediately after a set search task or about a search recalled from the past week. Where feasible, brief ratings collected at several points during a search would show how emotions change across its stages. Because Proposition 2 concerns the effect of search-specific emotions beyond general emotions, both must be measured in the same study and entered separately in the analysis.

Psychometric validation of adapted instruments. Adapted instruments, including the Teacher Emotions Scales, the Emotional Self Efficacy Scale and new measures of search emotions, information seeking, constraints and

support, should undergo five steps before they are used to test the propositions. The first is review of content by specialists in language teaching, library and information science and measurement. The second is cognitive interviews with Nigerian lecturers, to check that items are understood as intended. The third is a pilot study. The fourth is confirmatory factor analysis on an adequately large sample, separate from any sample used to refine the items. The fifth is estimation of reliability, together with evidence of convergent and discriminant validity, for example showing that search-specific emotions are related to, but distinct from, general teacher emotions. Where comparisons are made across types of university, measurement invariance should be tested (Kirk et al., 2008). Where structural equation modelling is used, the measurement model should be evaluated before structural paths are interpreted, several fit indices should be reported, and theoretically plausible alternative models should be compared (Hu & Bentler, 1999).

Testing pathways over time. A cross-sectional survey can give initial evidence for Propositions 1 to 3 and 5, but it cannot establish the order of events that mediation and feedback imply. Proposition 4 should therefore be tested with constraints, frustration and avoidance measured at successive times, for example within a search episode or across the weeks of a professional development task. The feedback pathway requires a panel of at least three waves over a period in which teachers undertake several information tasks, analysed with cross-lagged models that estimate whether search outcomes at one wave predict emotions and emotional self efficacy at the next. The moderating effects in Propositions 3 and 5 can be tested with interaction terms and, for Proposition 5, with intervention studies comparing lecturers who receive targeted library consultations with comparable lecturers who do not. Improvement in such studies should not be attributed to reduced affective

load unless that mechanism is itself measured.

Reducing bias. Because predictors and outcomes may be collected from the same respondents at the same time, procedural remedies against common method bias, such as separating measures in time and combining self-report with search logs, should be used alongside appropriate statistical checks (Podsakoff et al., 2003). Interviews with teachers, librarians and managers would explain how the proposed relationships operate in practice, and mixed methods designs combining these sources would strengthen the evidence (Creswell & Creswell, 2023). Studies should include universities with different ownership, locations and levels of library provision.

2.11 Limitations

The model rests on a critical synthesis rather than a systematic review, so relevant studies, particularly Nigerian theses and local journal articles on academics' information seeking, may have been missed. The Nigerian evidence available is limited, largely descriptive and in part dated, and most research on language teachers' emotions comes from other countries. The model's six components and several pathway types make it demanding to test, which is why staged testing with validated local instruments is proposed. The operational definitions and measures in Table 2 are proposals that have not been validated.

3. Conclusion and Recommendations

This paper has proposed an affective model of English language teachers' information seeking for professional development in Nigerian universities, drawing on control-value theory, broaden-and-build theory, the Information Search Process and affective load theory. Its central claim is conceptual: that the emotions teachers experience during a particular search, as distinct from their general feelings about teaching, may help explain why teachers facing similar needs and conditions respond differently to difficult searches, and that emotional self efficacy and

institutional support may change those responses. These relationships have not been established among Nigerian teachers and are offered as propositions for testing.

The following recommendations are therefore tentative. University libraries may pilot research consultations and search support for academic staff, and evaluate their effect. English departments may encourage research groups and mentoring in which lecturers share information problems and strategies. University management should continue to address electricity, connectivity and database access, which matter whatever the role of emotion proves to be. Above all, the five propositions should be tested in several Nigerian universities, using instruments validated in that setting, measures that separate general from search-specific emotions, and longitudinal and mixed methods designs that can examine the model's mediating and feedback pathways over time.

Statement on the Use of Artificial Intelligence Tools

The authors used AI tools in preparing this manuscript. It was used for language refinement and consistency checking. No AI tool was used as a source of scholarly evidence, and no data were generated or analysed, since this is a conceptual paper. The authors take full responsibility for the accuracy, originality and integrity of the manuscript. No AI tool is listed as an author.

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