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Factors influencing Information Literacy Development and Community Engagement in Rural Schools of North West Province, Mafikeng

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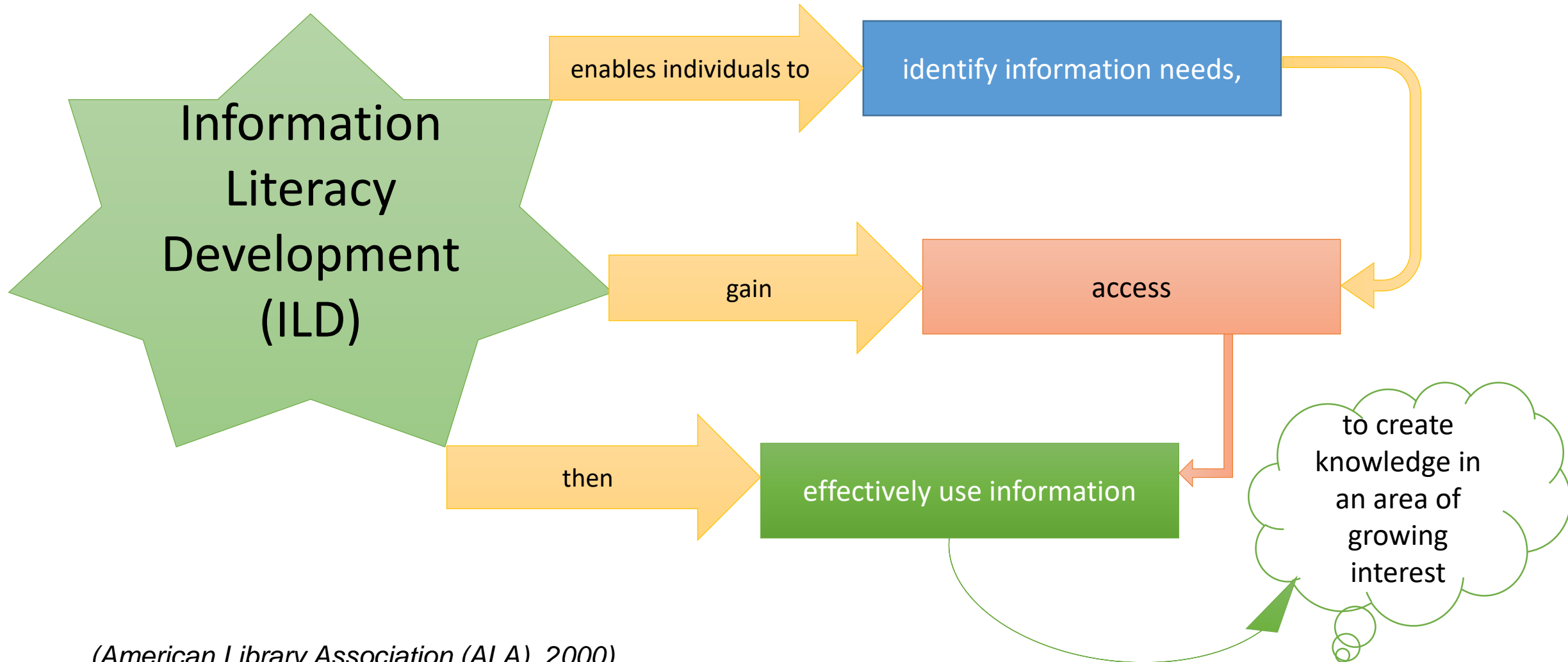
North-West University



Outcomes

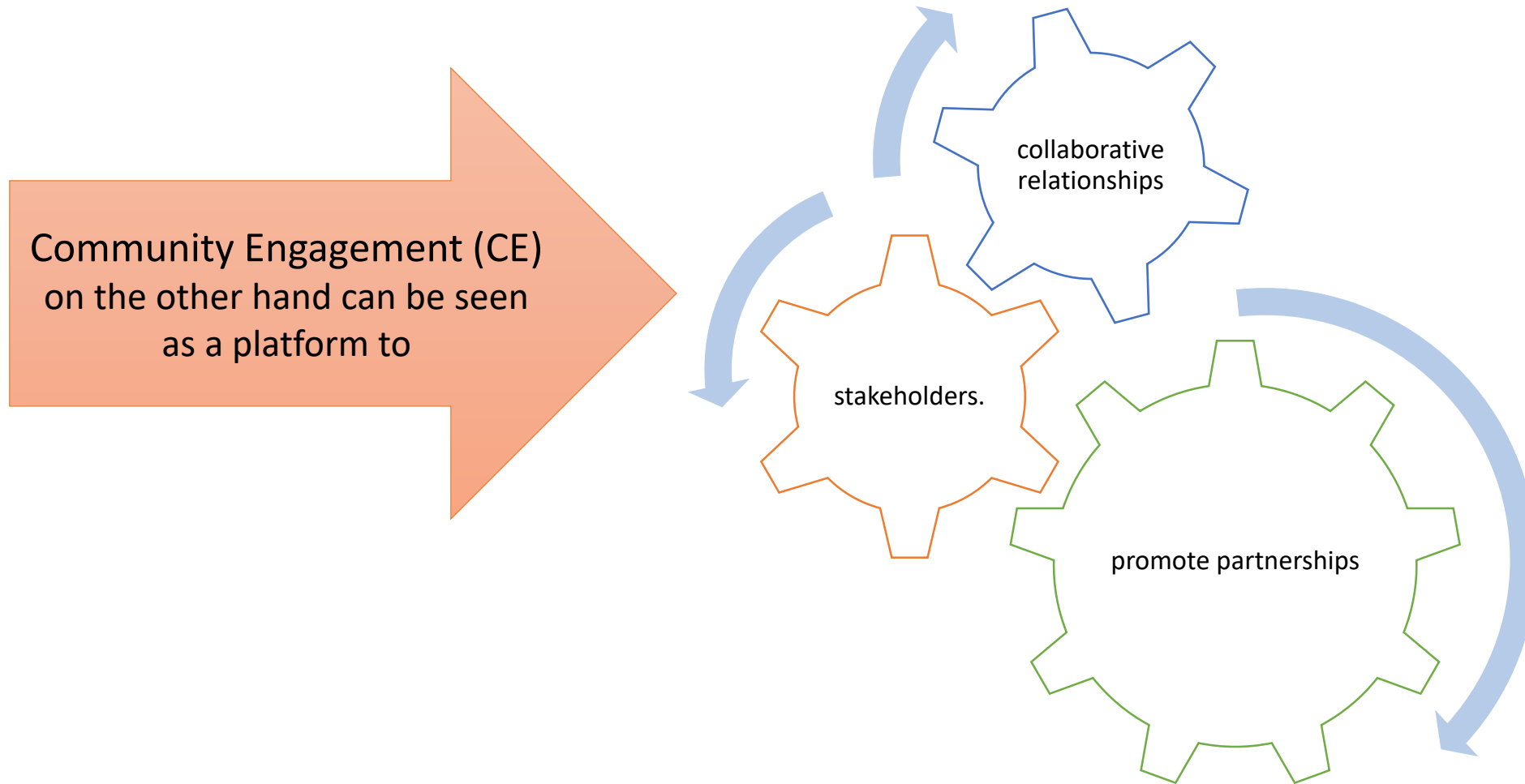
- Introduction and Problem Statement
- Literature Study
- Methodology and Analysis
- Empirical Results
- Discussions and Recommendation
 - Research Limitations
 - Future Research
- Conclusions
- References

Introduction and Problem Statement



(American Library Association (ALA), 2000)

Introduction and Problem Statement cont.'



(Bringle & Hetcher, 2002 and American Library Association (ALA), 2018).

Introduction and Problem Statement cont.'

- Literacy is an all-inclusive activity that engages community, schools and children for sustainable development.
 - ✓ There is limited research on the factors influencing Information literacy Development in community engagement projects in rural schools of Mafikeng, in the North West Province.
 - ✓ there is a lack of information literacy development and community engagement for learners in rural schools.
 - ✓ previous studies have highlighted that IL education has generally been developed for students in higher education with some limited consideration for the three other contexts of learners in high schools; in workplaces and professions and lastly for the general public (Anderson-Story, Dow, Kane & Ternes, 2014).
 - ✓ According to the American Library Association (ALA), (2000) Information Literacy (IL) prepares individuals to identify information needs, access, evaluate, store, retrieve and effectively use information in an ethical manner.
- The purpose of this study is to identify factors that influences ILD - in communities around rural schools in the areas of Mafikeng, North West Province.

Introduction and Problem Statement cont.'

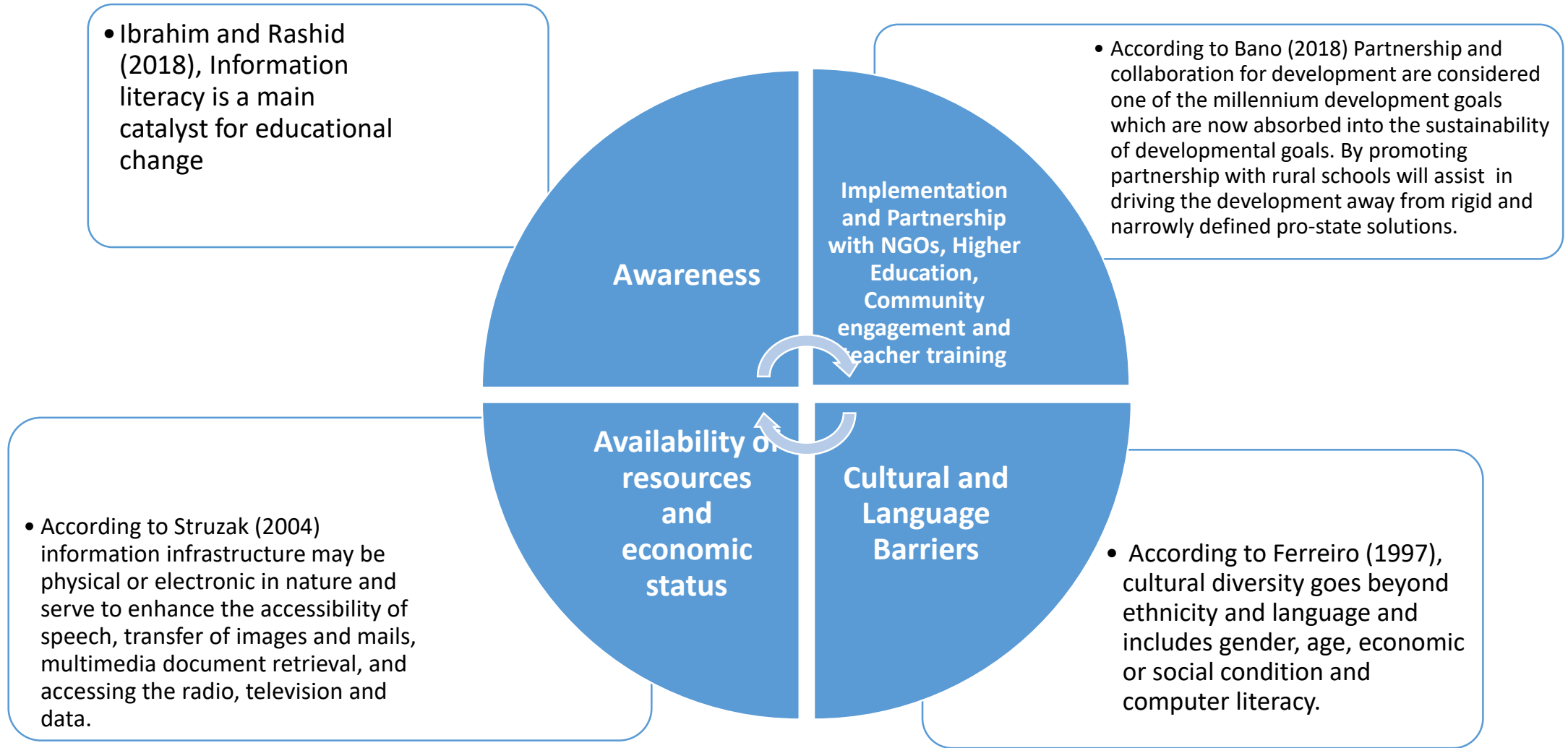
- IL therefore, is key to developing the critical skills required in era of fourth industrial revolution
- It can also enable individuals to identify their potential and improve their well-being.
- McNulty (2018) categorized the necessary skills to be considered in the 21st century

Skills for the 21st Century

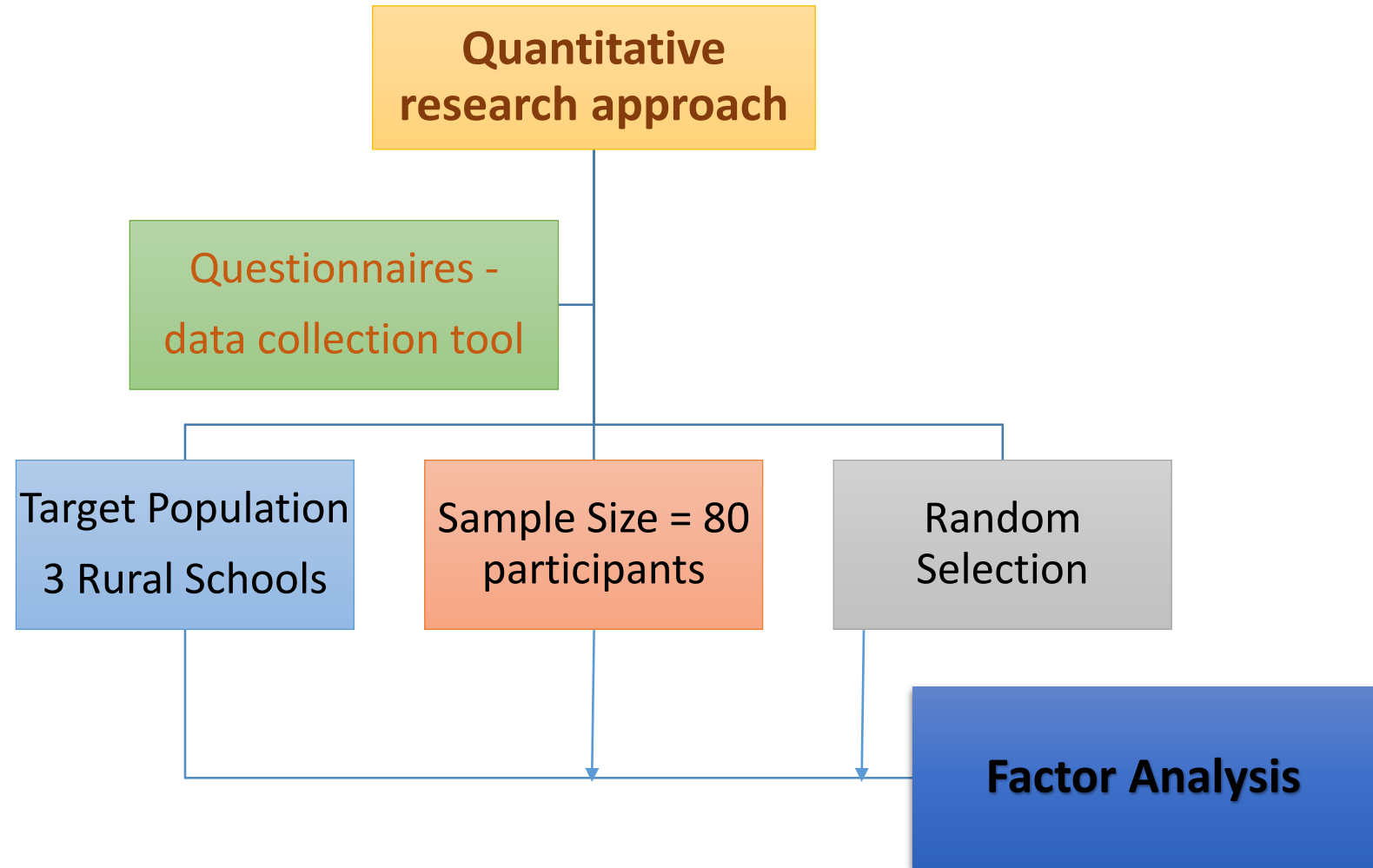


Figure 1: The 4IR skills for the 21st Century (McNulty, 2018)

Literature Review



Methodology and Data Analysis



Methodology and Data Analysis cont'...

Data Description

- Permission was requested from participants before conducting the study.
- A total of 80 questionnaires were distributed to the rural schools and only 65 were collected. Out of the 65 questionnaires, 51 were completed fully.
- The questionnaire consisted of three sections:
 - the first section had demographic information,
 - the second section had information literacy questions and
 - the third section had four-point Likert scale questions with the following levels (Strongly Disagree (1), Disagree (2), Agree (3) and Strongly Agree (4).
- Once the survey was completed questionnaires were analysed using the SPSS software.

Data Analysis

- Factor analysis (FA) was used to identify the factors influencing Information Literacy Development and community engagement in rural schools of Mafikeng.
- FA is an exploratory statistical technique for identifying which underlying factors are measured by a much larger number of observed variables.
- Factor analysis is a data reduction data analysis technique (Churchill & Iacobucci, 2006).

Empirical Results

• Demographic Analysis

- ✓ Table 1 displays the distribution of the demographic variables.
- ✓ The majority of respondents **70% were females and only of 30% males.**
- ✓ Regarding the distribution of age, 60% were in the age group 18 to 25 years, 26 to 35 years 22% and those above 35 years 12%. This suggests that respondents in the sample are mostly young and female.
- ✓ Most respondents live in the villages around Mafikeng are of African origin almost 94%.
- ✓ Regarding the level of education of respondents, above half 52% had matric qualifications, those with a diploma 16%, those with a degree almost 18% and those with an honours degree 12%.
- ✓ The respondents who are not married make up 62% and only 18% are married.
- ✓ Almost 46% of the respondents were unemployed, self-employed 14% and the rest about 40% employed in the public and private sector.
- ✓ Most of the respondents almost 70% live in the rural areas around Mafikeng area.

Table 1 Demographic variables

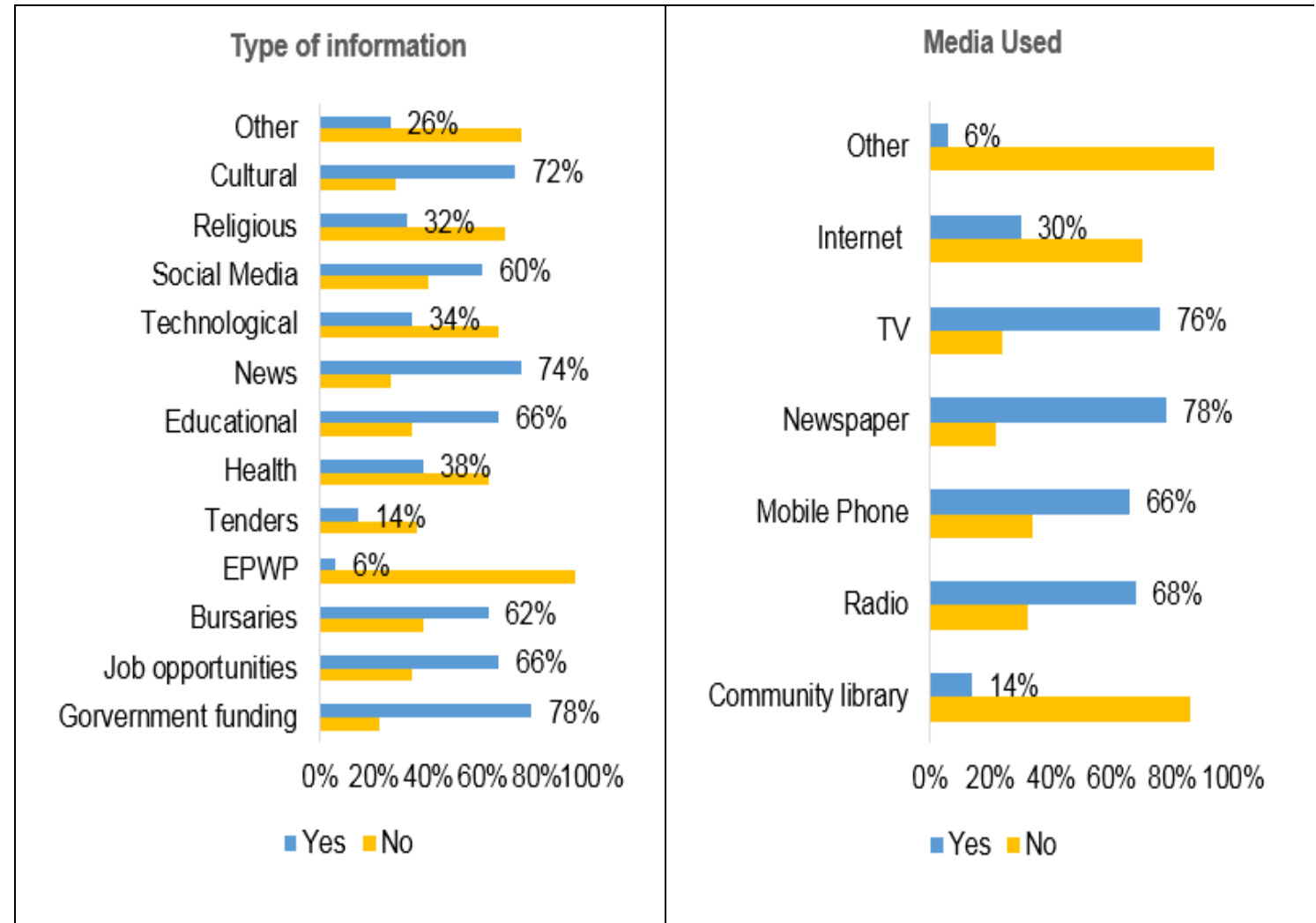
Variable	Levels	Frequency	Percent
Gender	Male	15	30%
	Female	35	70%
Age	18-25 years	30	60%
	26-35 years	11	22%
	Over 35	9	18%
Population Group	African	47	94%
	Indian	2	4%
	Coloured	1	2%
	Other	1	2%
Level of Education	Matric	26	52%
	Diploma	8	16%
	Degree	9	18%
	Honours Degree	6	12%
	Other	1	2%
Marital Status	Single	31	62%
	In a relationship	8	16%
	Married	9	18%
	Widowed	2	4%
Economic Activity	Looking for employment	23	46%
	Self Employed	7	14%
	Public servant	17	34%
	Private sector	3	6%
Are living in this community?	No	15	30%
	Yes	35	70%

Empirical Results cont'...

• Information Literacy Variables

- ✓ Regarding the type of information community members are interested in and the media used Table 2 displays this information.
- ✓ As seen from Table 2 community members require information on government funding 78%, news and current affairs 74%, information about culture 72%, job opportunities 66%, education 66%, bursaries 62% and social media 60%.
- ✓ Respondents scored less on information related to religion, technology, health, tenders and the extended public works program (EPWP).
- ✓ Media used by respondents in these communities include newspapers 78%, TV 76%, mobile phones 66% and radio 68%.
- ✓ Respondents indicated that there is lack of community libraries 14% and inadequate internet coverage 30% in their communities.

Table 2 Type of Information and Media Used



Empirical Results cont'...

• Information Literacy Variables

- ✓ A number of challenges were identified that hinder the accessing of information by community members as shown in Table 3.
- ✓ The most important challenges are language 84%, teacher training 80% and lack of partnerships with NGO's and the department of higher education 72%.
- ✓ Respondents also mentioned timing of broadcasts 68%, services not available 64% and the expensive costs of information resources 54% as some of the challenges.

Table 3 Barriers for Accessing Information

	No	Yes
Language	16%	84%
Teacher Training	20%	80%
Lack of partnerships with NGO's and higher education	28%	72%
Timing of broadcast	32%	68%
Services not available	36%	64%
Costs too expensive	46%	54%
Poor roads	50%	50%
Lack of electricity	88%	12%

Empirical Results cont'...

• Information Literacy Variables

- ✓ Regarding information technology resources, respondents indicated that community members owned TV's 100%, mobile phones 66% and radios 62%.
- ✓ Very few respondents own computers only about 6%. Figure 2 displays this information.

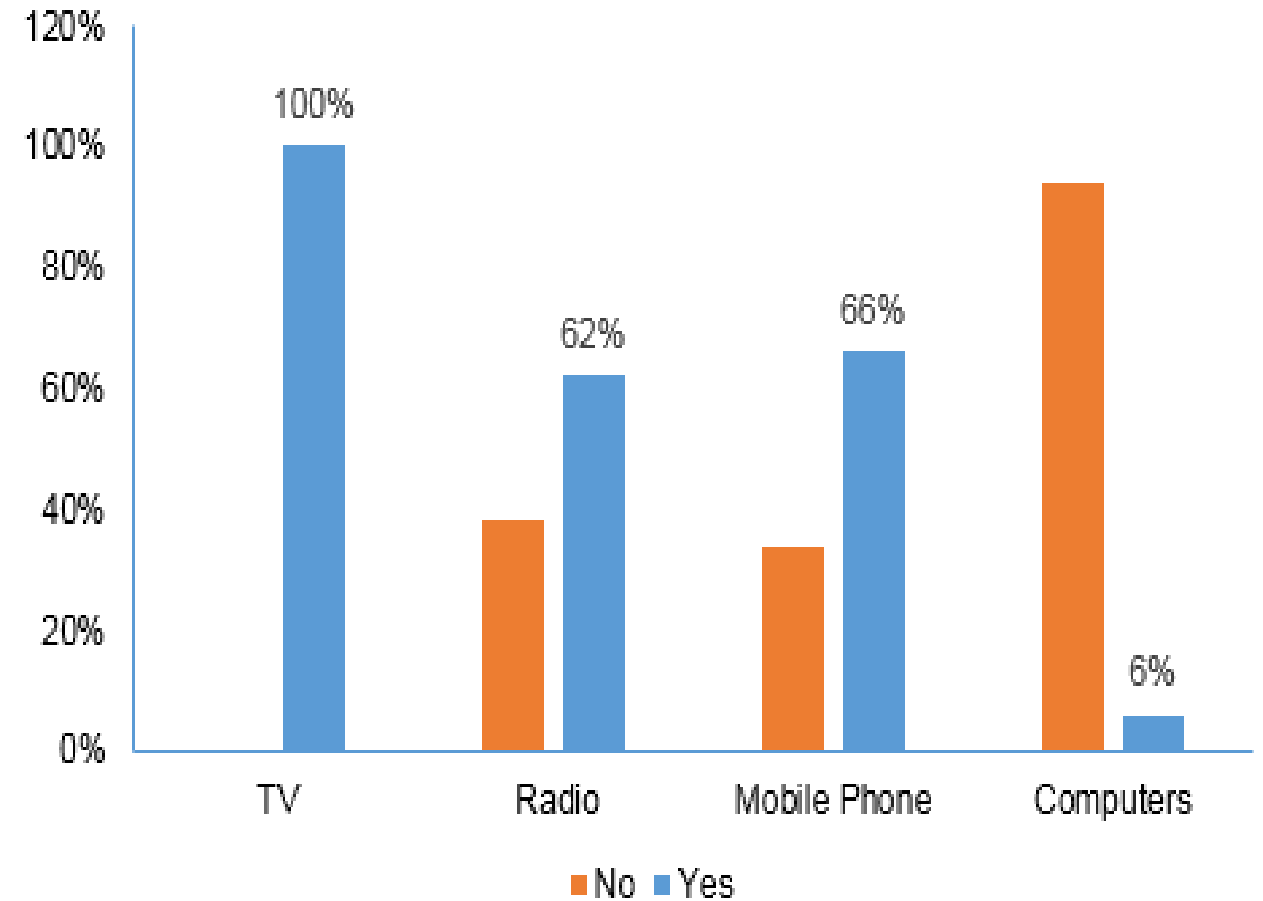


Figure 2 Technology Owned

Empirical Results cont'...

- **Information Literacy Variables**

- Respondents were asked if they knew how to use mobile phones, tablets, computers, laptop and internet.
- Figure 3 shows the responses of the respondents. Mobile phone and Tablet usage 90%, computer and laptop 48%, while internet usage 62%.

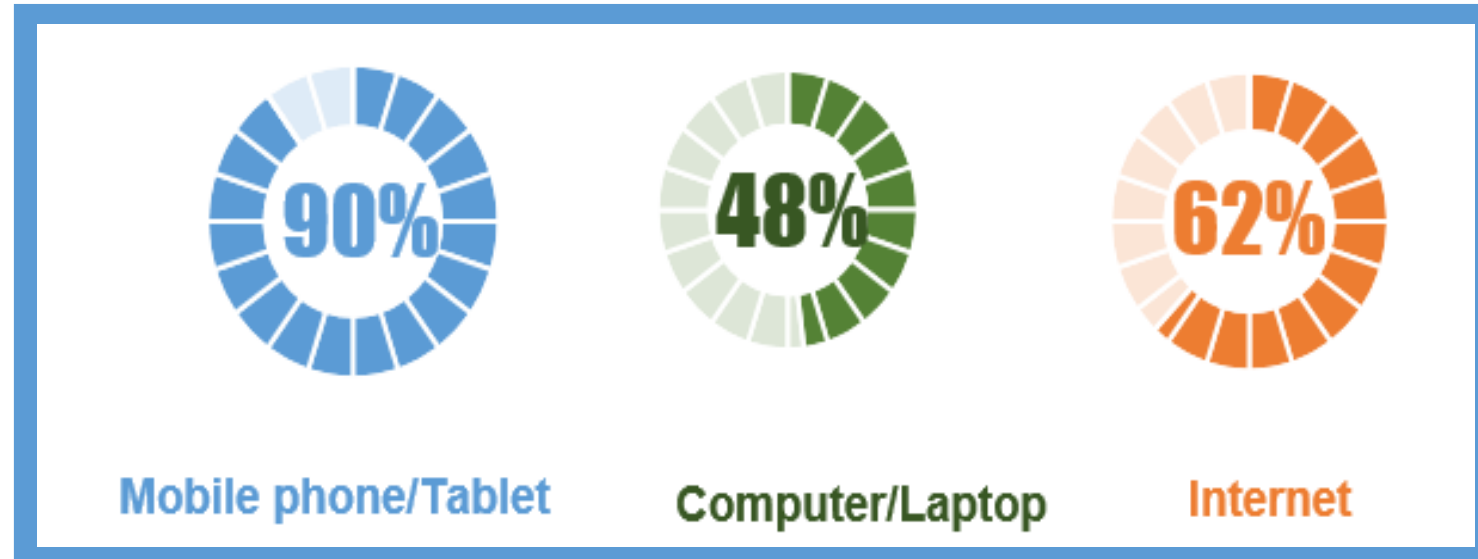


Figure 3 Technology Usage

Empirical Results cont'...

• Factor Analysis Results

- Exploratory factor analysis was conducted using principal component analysis extraction and Varimax rotation.
- A total of 48 items were used and Items with factor loadings less than 0.5 were removed.
- The exploratory factor analysis began with reliability testing of the data. Table 4 displays the Cronbach Alpha value of 0.828 which indicates that the sample data is reliable.
- Nunnally (1978), states that Cronbach's alpha of 0.6 or more is an acceptable reliability value for research purposes.
- To test for the validity the data the **Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and the Bartlett's Test** was used as shown in Table 5.
- Values close to 1 indicates that a factor analysis may be useful with the sample data and values less than 0.50, indicates conducting a factor analysis won't be very useful.
- The KMO value in this study is almost 0.6. According to Hair et al. (2010), a Kaiser-Meyer-Olkin (KMO) greater than 0.6 and a significant Bartlett's Test of Sphericity would indicates that the data factors well.
- The KMO in this study is acceptable although it could be low due a low sample size.
- The p-value = 0.000 is less than the 5% level of significance indicating that the data factors well.

Table 4 Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
0.828	30

Table 5 Kaiser-Meyer-Olkin Measure

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.591
Bartlett's Test of Sphericity	Approx. Chi-Square	897.283
	df	435
	Sig.	.000

Empirical Results cont'...

• Factor Analysis Results

- ✓ Factor analysis results are shown in Table 6.
- ✓ Four factors were identified from the factor analysis.
 - **Factor 1** consists of the statements *“Implementation of ILD strategies and partnerships with NGO’s”, “Community Engagement”* and *“teacher training”*. Twelve items loaded onto factor 1. Factor 1 can be summarised as *“Partnerships, Community engagement and Teacher training”*.
 - **Factor 2** consists of statement about *“Cultural and Language barriers”* and six items loaded on this factor.
 - **Factor 3** consists of statements about *“barriers that limit the access to information”* and three items loaded on this factor.
 - **Factor 4** consists of statement about *“Economic status”* of the respondents and 3 items loaded onto this factor.
- ✓ The four factors explain about 52.6% of the variance.

Table 6 Factor analysis Results

Variable	Component				Factor description
	1	2	3	4	
QLQ3				0.786	Economic status
QLQ5				0.772	
QLQ6				0.744	
QKQ4			0.521		Access
QKQ5			0.647		
QKQ8			0.581		
QKQ6		0.701			Cultural and language barriers
QKQ7		0.651			
QMQ2		0.803			
QMQ3		0.705			
QMQ4		0.649			
QNQ1	0.698				Implementation on ILD strategies and partnerships with NGO's , community Engagement, teacher training
QNQ2	0.644				
QNQ3	0.769				
QNQ4	0.666				
QNQ6	0.724				
QNQ7	0.729				
QNQ8	0.818				
QOQ1	0.717				
QOQ2	0.622				
QOQ3	0.495				
QOQ7	0.617				
QOQ8	0.720				

Empirical Results cont'...

Table 7 Description of variables

Variable	Description
QLQ3	I am able to buy newspapers to get information
QLQ5	I have able to buy internet bundles for my information
QLQ6	I am able to by airtime for my information
QKQ4	Timing of broadcast
QKQ5	Costs too expensive
QKQ8	Lack of partnerships with NGO's and higher education
QKQ6	Language
QKQ7	Teacher Training
QMQ2	My language prevents me from getting more information
QMQ3	My religion prevents me from getting more information
QMQ4	My culture does not promote the use of social media.
QNQ1	Schools in my community promotes ILD for learners and teachers
QNQ2	The curriculum in schools supports ILD in my community
QNQ3	Education officials assist ILD implementation in our schools
QNQ4	Community leadership is involved in ILD in the community
QNQ6	I am able to get information I need on time in my village
QNQ7	The National Department of education helps us with information literacy in our village
QNQ8	The village leaders support information literacy in our village
QOQ1	We have partnerships with NGO's in the village for ILD
QOQ2	We have partnerships with DOHEs in the village for ILD
QOQ3	We have partnerships with Universities regarding information development in the village
QOQ7	Teacher training programs help this village with information literacy development
QOQ8	I am able to get all the information I need in my village

Discussions and Recommendations

- **Discussions**

- Findings from this study showed that there are four **main factors that affect information literacy development** in rural school in around the Mafikeng area.
- **Partnerships, Community engagement and Teacher training** make up Factor 1, **cultural and language barriers** is Factor 2, **barriers to accessing** information is Factor 3 and **economic status** is Factor 4.

- **Recommendations**

- Based on this study the following recommendations are made:
 - It is important form **partnerships such as NGO, Universities and communities to work together in ILD**
 - ILD building **community awareness** of information needs that takes into account identification, access and use of information
 - As part of ILD there is need to provide information based on the **cultural background of schools and the community**

- **Research Limitations and Future Research**

- Although this study has unveiled some valuable insights into factors influencing information literacy development, there are some limitations.
- Firstly, the use of small sample sizes may lead to misleading results and hence future studies to use a much bigger **sample size**.

Conclusions

- Four Factors influencing ILD
(1. Implementation and integration of resources, partnerships with NGO's, Higher Education and Community Engagement, Teacher Training 2. Culture and Language 3. Economic Status 4. Access to information)
- These factors were also identified in the literature study conducted and they were confirmed by the factor analysis.

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An illustration featuring two hands holding a banner. The hands are positioned at the bottom corners of the banner, with the left hand on the left and the right hand on the right. Both hands are wearing dark suit sleeves with white cuffs. The banner is orange and has the words "THANK YOU" written in white, bold, uppercase letters. The background is a solid light blue color.

**THANK
YOU**